

REMARKS/ARGUMENTS

Status of the Claims

Claims 1-23 were originally filed in the present application and have been subjected to a restriction requirement. Claims 21-23 have been elected for prosecution, and these claims have been rejected. As outlined above, Claim 21 has been amended. Therefore, Claims 1-23 are pending in this application, however, only Claims 21-23 are currently under consideration.

Claims 21-23 stand rejected under 35 USC §103(a) as being unpatentable over Friese, US Pat. No. 4,816,100 in view of Etheredge et al., US Pat. No. 5,928,184 (“Etheredge”), and Strange, US Pat. No. 3,205,750. Applicants respectfully traverse this rejection.

The present invention relates to a method for the manufacture of a tampon, and it comprises several specific steps. The steps include (a) providing a web of liquid-permeable, thermoplastic apertured film, (b) forming a line of weakness comprising perforations and scores extending substantially from the first edge to the second edge, (c) applying a force substantially parallel to the length of the web sufficient to separate an individual sheet from the web at the line of weakness, (d) positioning the individual sheet over an absorbent sliver, (e) attaching the individual sheet to the absorbent sliver, (f) forming the absorbent sliver into a tampon blank, and (g) compressing the tampon blank to form a substantially cylindrical, compressed tampon having a cover comprising the individual sheet. (Page 5, line 16- page 6, line 2.) The web has opposed first and second edges and a substantially infinite length. (Page 4, lines 13-15.)

Materials that are suitable for use as the liquid permeable sheet include materials such as polymeric films, fibrous nonwovens, foams, paper, and woven fibers. (Page 11, lines 13-16.) A representative, non-limiting list of polymeric films that may be used with the present invention include polyolefins, such as polypropylene and polyethylene; polyolefin copolymers, such as ethylene-vinyl acetate (“EVA”), ethylene-propylene, ethylene-acrylates, and ethylene-acrylic acids and salts thereof; halogenated polymers; polyesters and polyester copolymers; polyamides and polyamide copolymers; polyurethanes and polyurethane copolymers; and the like. (Page 11, lines 18-27.) The polymeric films may be apertured and/or embossed. (Page 11, line 28.) Films containing embossments and voids, such as apertures, may require engineering optimization. (Page 12, lines 1-4.) However, the invention of Claims 21-23 requires, *inter alia*, “unwinding a web of liquid-permeable, thermoplastic apertured film” (emphasis added).

Friese discloses a tampon for feminine hygiene having a cover formed of a liquid permeable, thermoplastic strip section that is heat-sealed to the outside of a nonwoven ribbon section. (Column 2, lines 45-48.) The strip section is further described as a nonwoven liquid permeable thermoplastic. (Column 3, lines 43-44.) Cutting rollers cut through the strip in a transverse direction substantially but not completely, so that the leading strip section formed as a result of cutting is still joined to the following strip by means of some small so-called webs. (Column 8, lines 42-46.) The strip section coming from the cutting station is sucked against the circumference of the vacuum roller and in a stretched position, is carried in a clockwise direction in the nip formed by the vacuum roller with the acceleration roller. (Column 8, lines 61-66.) The strip section is accelerated to double the speed and is consequently torn off completely from the following nonwoven strip in the region in the cut made in the cutting station. (Column 8, line 68 to Column 9, line 4.)

Etheredge purports to disclose a multilayer absorbent article that includes a layer of non-absorbent material formed into a tunnel-shaped loop enclosing absorbent material. An overwrap material, in turn, encloses the tunnel-shaped loop of non-absorbent material. Etheredge indicates that the non-absorbent material has ports or "a multitude of small perforations" to permit fluid to be transported into the absorbent core. Allegedly "the appropriate size and number of ports" "can be determined by one skilled in the art" (Column 4, lines 32-48).

Strange purports to disclose means for perforating paperboard including "a series of spaced cuts that extend completely through the thickness of the paperboard and intermediate cuts that extend only partially therethrough" (Column 1, lines 9-13).

The Office alleges that Friese discloses a method for the manufacture of a tampon similar to the presently claimed invention but that the reference discloses a thermoplastic non-woven material (not an apertured film) and the use of perforations (instead of a combination of perforations and scoring) to form the line of weakness. The Office continues and alleges that Etheredge discloses the use of an apertured film in the manufacture of tampons. The argument that it would have been obvious to one of ordinary skill in the art to have provided Friese with an apertured film in place of the non-woven thermoplastic strip to allow more uniform wetting of the tampon surface, etc.

However, in order to overcome the failure to find a suggestion to incorporate perforations and scoring in forming the line of weakness in a polymeric film, strip section that is subsequently

accelerated to separate the section completely from the following nonwoven strip in the region of the line of weakness, the Office resorts to Strange. Strange is directed to paperboard materials, and these materials have very different properties than thermoplastic films when each is stretched to failure.

Applicants respectfully submit that the present rejection is improper. It fails to consider the invention as a whole (see MPEP 2144.08, citing *Jones v. Hardy*, 727 F.2d 1524 (Fed. Cir. 1983)). Further the present rejection also ignores the problem-recognition element of the presently claimed invention, and it repeats the improper "Obvious to Try" rejection (see *Jones v. Hardy*, 727 F.2d 1524, 1530).

As pointed out in the response filed on or about February 5, 2002 (and as detailed on page 3 of the present specification), Friese fails to recognize the problem solved by the present invention. The partially severed nonwoven of Friese is relatively controllable during further separation. The unsevered strands of material will not elongate significantly, and the partially separated section of material remains controlled during final separation due to the continuous fibers present that can be stretched and/or straightened. (Page 3, lines 19-24.) Continuous webs, such as apertured films, are less controllable in the process of Friese. (Page 3, lines 25-26.) Therefore there are different problems faced by one skilled in the art using a nonwoven fabric cover material and one using an apertured film cover material. The different problems faced by these practitioners would not necessarily lead one of ordinary skill in the art to modify the teachings of Friese as required in the presently claimed invention. The remaining references to Etheredge and Strange also fail to recognize the problems facing the present inventors. Thus, not one of these references recognizes the problem involved in maintaining control of the free end of a thermoplastic apertured film resulting from replacing the nonwoven fabric of Friese with the apertured film of Etheredge. Thus, Applicants respectfully submit that the present invention is improper.

Again, Applicants respectfully point out that the Office has identified three potential modifications of Friese: differently shaped perforations, scoring, and intermediate grooving. While it may be obvious to try any one of these (or any combination thereof) to maintain control of a free end of apertured film as the film is stretched in the vicinity of a line of weakness to separate the section from a supply, the Office has not indicated how the prior art teaches or suggests any one of these potential modifications or any combinations thereof would be have a

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reasonable expectation of working with a polymeric film. Again, the thermoplastic apertured film has very different characteristics than the paperboard of Strange.

For these reasons, Applicants respectfully submit that the Office Action fails to establish a prima facie case of obviousness of the presently pending claims. Reconsideration and withdrawal of this rejection are earnestly solicited.

Applicant respectfully requests a timely Notice of Allowance in this case.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Joel A. Rothfus', with a horizontal line extending to the right.

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